Staff comments in red.

EXHIBIT A

City of Flagstaff, Stormwater Division

Interim Stormwater Utility Credit Manual

Remove "interim"

This Credit Manual is provided pursuant to the provisions of the Stormwater Management Utility Ordinance (Division 12-02-001). Section 12-02-001-000(g) states that ". . . credits against stormwater utility service charges are an appropriate means of adjusting fees, rates, rentals, charges, fines, and penalties . . . ."

Furthermore, said Ordinance defines "credit" as ". . . a program or service or activity that reduces the Stormwater Management Utility's cost of providing stormwater management programs . . .".

At present, this Manual has been adopted on an interim basis due to pending development of the City's Stormwater Master Plan. The Master Plan will specifically identify stormwater quantity and quality Best Management Practices (BMP's). These BMP's will be incorporated into the Manual in order to provide credits to the community.

Stormwater quality BMP's needs to changed to LID/water harvesting…
In order to be fair and equitable to the community, the credits may be applied retroactively to the initial billing date of July 1, 2003. However, a sunset date is established for the retroactive credit. Applications made after July 1, 2007, will not receive the retroactive credit, but will be credited on future bills according to the appropriate credit. For some stormwater controls, the credit is provided in a two-tier approach corresponding to changes in the credit structure per Ordinance 2006-002.

This Manual has been revised pursuant to the stormwater utility rate increase detailed in City Ordinance No. 2006-02. Credits have been changed for detention basins and stormwater quality best management practices (BMP's). Due to changes in the City's Stormwater Management Program, credits for detention basins constructed after year 2000 have increased from 12.5% to 19.25%, and for basins constructed prior to the year 2000, credits have increased from 5% to 9%. Due to these changes, the retroactive credit will be apportioned accordingly, as detailed in the Application. The credit for stormwater quality BMP's has increased from 50% to 68% and will also be credited in a phased approach.

The above gets omitted….
The following is a proposal to provide credits for the Stormwater Utility Fee. The credit is based on stormwater quantity and quality issues as discussed below:

City Stormwater Program Elements

An assessment of the City's Stormwater Management Activities is necessary in order to determine appropriate credits. Essentially, the Program has two overall functional areas that include many sub-categories: Stormwater Quantity and Stormwater Quality. Stormwater Quantity is clearly the larger of the two and includes the following activities:

- Regulatory Compliance: FEMA Regulations, ADWR Regulations, City Floodplain Regulations, Floodplain Permits, CRS, NFIP
- Civil Plan Review and Drainage Report Review
- Capital Drainage Improvement Program
- Drainage Complaint resolution
- Special Projects: rain and stream gages, LIDAR
- Masterplan

Stormwater Quality activities include:

- NPDES Compliance Activities

As the Stormwater Program is evolving via the proposed Master Plan, qualitative assessments must be performed. Below is a breakdown of staffing allocations.

- Regulatory Compliance 19.5%
- Civil Plan Review/Drainage Report 18%
- Capital 14%
- Special Projects 7%
- Master Plan 14%
- NPDES Compliance 26.5%

The above numbers to be revised: only slight changes anticipated.

An assessment of the mitigations created by detention basins shows an impact of approximately 38.5% of the Stormwater Division activities (10% of regulatory, 3.5% special projects, and 11% Master Plan, and 14% Capital Improvements). Quality improvements and volume decreases (done together) impact approximately 68% of the program (same as for detention adding NPDES Compliance and 3% Master Plan).

The above methodology should probably be contained in an administrative document. Rarely does something like this appear in an Ordinance.

Stormwater Quantity

- Detention/Retention Basins

Stormwater detention/retention provides benefit to the City's stormwater conveyance system by attenuating the peak runoff leaving a site and thereby reducing the peak discharge on the receiving watercourse in most instances. Credits are proposed on a tiered basis for detention basins depending on the peak mitigation pursuant to the City Regulations that were effective at the time of construction.

Retention is not generally allowed per City Code. However, an exemption may be granted due to topography. For those rare instances resulting in a City-approved retention facility, credits are proposed

to be the same as detention facilities. This needs some changes, probably remove retention now, with the adoption of LID.

An examination of the City runoff coefficients for developed versus undeveloped property and application of the Rational Equation show that impervious surface versus natural ground results in an increase of about 40-50% in volume of runoff. Post-development discharge peak rates are required to be no more than pre-developed conditions. Therefore, detention reduces the rate at which stormwater leaves a site by 40-50% (as opposed to no detention and a developed site). The specific amount of increase or decrease is dependent upon the existing site condition. On the primary watercourse, the peak discharge is reduced less than these numbers due to the volume increase and the effect of those volume increases on the hydrograph of the receiving watercourse.

There are difficulties in determining an appropriate credit for stormwater detention. When considering flood control over the entire receiving watercourse, the effects of detention are different based on the location in the watershed. For example, detention performed in certain portions of the watershed may actually increase the peak discharge, while a peak reduction can occur if detention is waived within certain portions of the watershed. The proposed City Drainage Master Plan is intended to help address these difficulties. The credit proposed for detention basins constructed prior to year 2000 is based on an assessment of the discharge rate of 100 year detention (current standard) as opposed to 25 year detention (pre-2000 standard).

A lot of the "justification" wording should be omitted….same discussion as above, should be in administrative document?

A developed property that utilizes stormwater detention typically must reduce the peak flow by about 50% in order to meet the peak discharge of the pre-developed conditions. Therefore, since the peak discharges are decreased on average about 50% and detention impacts about 38.5% of the current program, detention/retention credits should be 19.25% for detention/retention basins constructed after year 2000 and 9% for detention/retention basins constructed prior to year 2000.

- Stormwater Quality Improvements; Implementation of Stormwater Quality BMPs

There is a clear benefit to the City's conveyance system and the quality of our stormwater based on the implementation of a BMP that improves water quality and that may achieve a reduction in the amount or volume of stormwater released from a site. Detention provides no such benefit; and retention is generally not allowed per the City's Regulations. However, with the development of new BMPs, opportunities for stormwater quality improvements and volume reductions exist. Examples of BMPs that improve quality and reduce volumes are porous pavements, grassy swales, and artificial wetlands. In order to satisfy the City's exclusion of stormwater retention, a volume reduction proposal must be associated with a stormwater quality BMP that is reviewed and approved by the City. Criteria that will be considered includes infiltration, use of certain plants that demonstrate significant uptake of pollutants and assurances that standing stormwater will dissipate within a certain amount of time and not become a vector control issue. A credit is proposed for a quality improvement and volume reduction.

Demonstration of a Stormwater Quality BMP that improves water quality and contains the 100 year flood volume should be credited 68% with partial, proportionate credit provided for containment and water quality improvements of lesser rainfall-runoff events.

The above needs to be changed to LID/rain water harvesting, specific LID/Harvetsing amounts to be included (1 inch of LID). Note: still need overall proportionate share as some developments do more or less than the required 1 inch threshold.

- Conservation Easements

A credit is proposed for the recordation of a Conservation Easement. A Conservation Easement is defined as a nonpossessory interest of a holder in real property that, for conservation purposes as defined by A.R.S. 33-271(2), permanently protects that property from being developed or otherwise altered from its natural state in the future. A Conservation Easement operates like a deed restriction and is held by a governmental body empowered to hold an interest in real property, or by a charitable corporation or trustee of a charitable trust.

To qualify for a stormwater credit, the Conservation Easement must protect a minimum of 10 contiguous acres. The effect of the undisturbed land on stormwater quality can only be measured qualitatively. The Conservation Easement is directly related to stormwater quality, which is presently 25% of the City's stormwater program.

The proposed credit for the granting of a Conservation Easement is 10%.

- Development and Implementation of a Structured Educational Program.

A credit is proposed for an institution or organization that develops and implements a Public Education Program for primary, secondary and college-level students on stormwater management and water quality issues. The program must be designed to meet the goals and requirements of public education and outreach as defined in 40 CFR Parts 9, 122, 123 and 124 and also, A.R.S., Title 49, Chapter 2, Article 3.1 and Arizona Administrative Code, Title 18, Chapter 9, Articles 9 and 10.

The effects of a public education program on stormwater quality can only be assessed qualitatively, but it is considered a vital component of the City's Stomwater Quality Program. If such a program is properly structured, the program would assist the City with NPDES compliance activities. If an applicant proposes such a program, the City should assist in program development to ensure compliance with the above-cited requirements.

The proposed credit for the development of a Structured Educational Program is up to 20%. The Credit will be provided so long as the Educational Program is active.

- Water Harvesting for Residential Development

Residents who provide rain barrels of sufficient size on roof downspouts or other similar method(s) of collecting rainwater and use the rainwater for irrigation or consumption should be afforded credits. Collection of rainwater relates to reduced volume as well as improvements in quality.

A typical rain barrel only collects a small percentage of the total runoff from a typical roof section during the 100-year event. For a 20x20' roof section, 1000 gallons may be expected to run off. Nevertheless, there is a significant impact to water quality issues that must be addressed qualitatively. Roofs generate metals as pollutants and frequent rainfall runoff events are captured. The use of the roof water on vegetation as irrigation results in improvements to water quality.

The proposed credit for the installation of rain barrels on all residential downspouts should be credited 10%.

Proposed Procedure For Application of Credits:

An applicant must complete the attached Application Form and submit it to the Stormwater Division. Staff will review the application to assess completeness and partial credits, if any. Assuming eligibility requirements are met, an adjustment to the utility bill will be entered within 10 business days after the completion of the staff review.

The Stormwater Division Staff will provide periodic inspection activities to verify credits and to verify that credited facilities are being properly maintained. Upon discovery of a deficiency, a letter will be sent to the applicant noting the deficiency and suspension of the credit. Upon receipt of a correction notification attesting that the deficiencies have been corrected and upon verification of the corrections by the City, the credit will be reinstated.

City of Flagstaff, Stormwater Division

Application for Interim Stormwater Credit

Dear Citizen;

This is an application to the City of Flagstaff to reduce your Stormwater Utility Fee. If you have implemented certain Stormwater controls on your property, you may be eligible for a reduction in your current fee. Please check the appropriate boxes and provide any necessary supporting documents requested with this application. An incomplete application will not be processed.

Upon review, verification and approval of your application, the City will provide the credit to your account within 10 business days. A copy of the processed application will be provided to you for your records.

CREDITS:

Update/remove retroactive…

___ **Stormwater Detention/retention** (commercial, industrial, multi-family, and members of homeowners associations):

___There is a detention/retention basin on my property constructed after year 2000 that provides detention/retention for the 2, 10 and 100-year events. The basin is presently functional and maintenance is performed as necessary (for a home owner's association, please provide documentation that basins are inspected and maintained).
A 12.5% credit is provided from July 1, 2003 to _July 6, 2006 and a credit of 19.25% is provided from _July 7, 2006 henceforth.

___There is a detention/retention basin that was constructed between years 1990 and 2000 that provides detention/retention for the 25-year flood event. The basin is presently functional and maintenance is performed as necessary (for home owner's association, please provide documentation that basins are inspected and maintained).
A 5% credit is provided from July 1, 2003 to _July 6, 2006 and a credit of 9% is provided from July 7, 2006 henceforth.

____ **Residential Water Harvesting**

___I have installed at least two rain barrels, of a minimum 50 gallon capacity each, on roof downspouts and utilize the stormwater for irrigation or other recycling purposes, or I have installed other types of catchments and reuse the stormwater for purposes of recycling. Attached is a sketch of my lot and house showing the locations and sizes of my rain barrels or catchments. Also attached is a description of the use of the stormwater.
A 10% credit may be applied.

____ **Stormwater Quality BMPs** (residential, commercial, and industrial) update LID/RWH

___I have implemented Stormwater Quality Best Management Practices (BMPs) on my property according to recognized BMP manuals that improve the water quality of the runoff leaving my property or to reduce the quantity of runoff leaving my property. Attached I have included a description of the BMPs I have implemented, a sketch of my property and have shown the location of the BMPs.

Up to a 50% credit is provided from July 1, 2003 to July 6, 2006 and a credit of up to 68% is provided from July 7, 2006 henceforth.

___ **Conservation Easement**

___I am applying for the Conservation Easement Credit and have attached a copy of the recorded Conservation Easement, recorded Holder Acceptance, and survey map with legal description of the Conservation Easement. I acknowledge that the Conservation Easement protects at least 10 contiguous acres. Note: Prior to recordation of the Conservation Easement and Holder Acceptance, the applicant is encouraged to have all of the required documentation reviewed by City staff.
A 10% credit may be applied.

___ **Structured Educational Program**

___My institution/organization is applying for the credit for the development and implementation of a Stormwater Education Program. I have developed the program in conjunction with City staff and the program meets the goals and requirements of appropriate State and Federal Codes.
Up to a 20% credit may be provided.

_____ **Retroactive Credit Request** Remove

I would like to request that my credit be applied retroactively. I attest that the stormwater measures checked above have been in place and functioning since _____(month/year). I also attest that I have owned or lived at the property since _____(month/year). I also hereby give the City permission to enter my property for the purpose of conducting verification of my requested stormwater facility. Please note that credits are not applicable prior to the initial billing date of July 1, 2003 or creditable to previous property owners. This retroactive credit provision expires July 1, 2007.

Expired

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Name: _____

Site Address: _____

Mailing Address: _____

Telephone (wk/home): _____

Subdivision Name (if applicable): _____

Home Owner's Association Name and contact phone # (if applicable)

_____

_____

By signing below, I attest that the above information is true and correct. I acknowledge and agree that the City of Flagstaff may inspect my property to verify that my stormwater credits are existing and functioning properly. I further agree that I will ensure that my stormwater facilities will be properly maintained. I understand that if my stormwater facilities are no longer in place, or are not functioning properly, my credit will be revoked. I also acknowledge that misrepresentation of the above information may constitute fraud and may be punishable by law.

Print Name Signature

You will be sent an executed copy of this form for your records.

For office use only

Received by: _____

Application Verification: _____

Date applied toward billing: _____

Authorized signature: _____